

**UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY
CAMDEN VICINAGE**

**IN RE
PAULSBORO DERAILMENT CASES**

**MASTER DOCKET NO.:
13-CV-784 (RBK/KMW)**

ALICE BREEMAN *et al.*,

Plaintiff,

vs.

**CONSOLIDATED RAIL
CORPORATION, *et al.*,**

Defendants.

**DEFENDANTS CONSOLIDATED RAIL CORPORATION, NORFOLK SOUTHERN
RAILWAY COMPANY AND CSX TRANSPORTATION, INC.'S REPLY
MEMORANDUM OF LAW IN SUPPORT OF MOTION TO EXCLUDE THE
EXPERT REPORT AND TESTIMONY OF LEE BROOKS, M.D.**

Filed on behalf of Defendants,
Consolidated Rail Corporation,
Norfolk Southern Railway Company,
and CSX Transportation, Inc.

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ALICE BREEMAN *et al.*,

Plaintiff,

vs.

**CONSOLIDATED RAIL
CORPORATION, *et al.*,**

Defendants.

CASE NO. 1:12-cv-7468 (RBK/KMW)

**DEFENDANTS CONSOLIDATED RAIL CORPORATION, NORFOLK SOUTHERN
RAILWAY COMPANY AND CSX TRANSPORTATION, INC.'S REPLY
MEMORANDUM OF LAW IN SUPPORT OF MOTION TO EXCLUDE THE
EXPERT REPORT AND TESTIMONY OF LEE BROOKS, M.D.**

NOW COME Defendants, Consolidated Rail Corporation, Norfolk Southern Railway Company and CSX Transportation, Inc. ("Defendants"), by and through their counsel, Burns White LLC, and submit this Reply Memorandum of Law in Support of their Motion to Exclude the Expert Report and Testimony of Lee Brooks, M.D.

I. PRELIMINARY STATEMENT

Plaintiff has failed to satisfy her burden of demonstrating that Dr. Brooks' opinions and methodology satisfy the requirements of *Daubert* and Fed. R. Evid. 702. Instead, Plaintiff has

offered only general conclusory statements and a protracted version of the “facts,” which are irrelevant to the admission of Dr. Brooks’ testimony.

Undoubtedly, Plaintiff’s recitation of Dr. Brooks’ credentials as a well-qualified pulmonologist misses the mark. Defendants are not attacking Dr. Brooks’ credentials in this matter, but rather his complete lack of a reliable methodology in reaching his conclusions in this case. An expert’s methods must have some scientific support beyond the testifying expert’s own hypothesis. Here, Dr. Brooks simply believes that any chemical exposure, regardless of dose or duration, exacerbates respiratory symptoms. Plaintiff’s attempt to buttress Dr. Brooks’ “methodology” by stating that his opinions are consistent with the New Jersey Department of Health, or expert witnesses in related derailment matters, is both illogical and irrelevant. The requirements of *Daubert* are not met by suggestions that others hold similar unsupported opinions.

In the end, Dr. Brooks’ conclusions are unreliable, speculative, and conclusory, providing nothing more than his *ipse dixit* regarding the alleged exacerbations of Plaintiff’s injuries. As demonstrated in Defendants’ Motion and this Reply, such testimony should be excluded, as it fails to satisfy the *Daubert* standards and Rule 702.

II. LAW AND ARGUMENT

A. It Is Plaintiff’s Burden To Demonstrate Scientifically Reliable Theories Of Medical Causation.

It is undoubtedly Plaintiff’s burden to demonstrate that the proposed testimony of Dr. Brooks satisfies *Daubert*’s requirements of reliability and relevance. *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 744 (3d. Cir. 2004). As demonstrated in Defendants’ Memorandum, Dr. Brooks did not attempt to quantify the dose of vinyl chloride received by Plaintiff; he failed to determine the amount of exposure necessary to exacerbate the alleged symptoms, as reported in

the scientific literature; and he failed to account for the other possible explanations for Plaintiff's exacerbated respiratory symptoms.¹ Indeed, Dr. Brooks' report fails to reference a single study to support his conclusions in this case.

Having failed to meet her burden with regard to Dr. Brooks' testimony, Plaintiff makes the following blanket assertion:

Since it is well known that vinyl chloride causes respiratory problems, there is no need for Dr. Brooks to personally "prove" that it's possible for vinyl chloride to exacerbate such problems. Saddling him with such an unnecessary "make-work" burden is not needed to determine that his opinion is reliable under Rule 702.

Id. at 22.

Plaintiff's contentions are nonsensical. It is indeed disputed by Defendants that Plaintiff was exposed to a sufficient quantity of vinyl chloride to cause the exacerbation of her injuries in this matter. Certainly, if these facts were undisputed, then Plaintiff would not require expert testimony in this matter. Likewise, Plaintiff's unsupported assertion that Dr. Brooks should not be required to provide a basis for his opinions does not discharge her burden in this matter. By simply declaring it "unnecessary", Plaintiff is essentially conceding that Dr. Brooks cannot prove that Plaintiff's alleged exposures caused the alleged exacerbations of her injuries.

B. Dr. Brooks' Methodology is Not Generally Accepted.

In an attempt to demonstrate that Dr. Brooks' methodology and opinions are reliable under *Daubert* and its progeny, Plaintiff simply states that "Dr. Brooks used a well-established and generally accepted methodology" - as if the fact that Plaintiff alleges it makes it so. Pl. Opp

¹ Plaintiff provides no support for her insinuation that the *Daubert* standard is more lenient for allegations of exacerbation as opposed to causation. Pl. Opp. at 1. ("Defendants fail to acknowledge that Dr. Brooks has not opined that the vinyl chloride exposure was *the cause* of [Plaintiff's] respiratory problems, but simply that the vinyl chloride exposure "was a substantial factor in contributing to her current condition, as the severity of her respiratory problems worsened after the incident."

at 6. Not surprisingly, Plaintiff again provides no citation to any peer-reviewed scientific literature where Dr. Brooks' "method" has been discussed and validated. "Something doesn't become 'scientific knowledge' just because it's uttered by a scientist; nor can an expert's self-serving assertion that his conclusions were 'derived by the scientific method' be deemed conclusive." *In re TMI Litig.*, 193 F.3d 613, 687 (3d Cir. 1999).

Instead, Plaintiff insists that because the New Jersey Department of Health ("NJ DOH") allegedly used the same circular reasoning as Dr. Brooks, that it somehow validates his methodology. Pl. Opp. at 6.² However, the NJ DOH report is not a peer-reviewed publication, but rather a poor quality survey administered to Paulsboro residents after the derailment. *See* Weed Declaration; Exhibit A at 11-15, attached to Def. Mem. The fact that Dr. Brooks failed to recognize the methodological flaws of the NJ DOH survey also explains why he considers his own subjective approach to be a "well-established and generally accepted methodology."

Undoubtedly, there is simply no transparent or reproducible methodology that Dr. Brooks can identify to allow the Court to determine whether his opinions are a result-oriented "judgment" as opposed to a scientifically or methodologically-based judgment. *See Magistrini v. One Hour Martinizing Dry Cleaning*, 180 F. Supp.2d 584 (D.N.J. 2002). Accordingly, his opinions must be excluded.

C. Temporal Relationship, Without More, Fails To Establish Causation.

There is no argument that Dr. Brooks relied solely on temporality for his opinions. *See* Brooks Rep. at 2 ("the severity of her respiratory problems worsened markedly after the incident."); Brooks Dep. at 111 (his opinion is based on "the fact that her symptoms got worse after her exposure"). However, Plaintiff's reliance upon the perceived temporal relationship

² Plaintiff's spurious contentions regarding the methodology of Defendants' expert, Dr. Greenberg, is a red herring which misconstrues the nature of a *Daubert* challenge.

between Plaintiff's alleged exposure and onset of injury or symptoms cannot fill the gaping analytical void in Dr. Brooks' analysis. Admittedly, as a part of the causation picture, an expert may draw conclusions about the effects of exposure to a chemical based upon the temporal connection between exposure and the onset of symptoms. *Heller v. Shaw Indus.*, 167 F.3d at 146, 158 (3d Cir. 1999). However, temporal relationship may not supplant scientifically reliable data supporting the relationship -- the ultimate conclusion, must always fit the data that allegedly supports it. *Id.*

In this case, not only does Dr. Brooks have no data supporting his opinions that Plaintiff's brief and acute exposure to vinyl chloride could or did exacerbate Plaintiff's injuries, but the wealth of scientific data manifestly refutes such allegations. *See* Weed Declaration, attached to Def. Mem. Accordingly, Plaintiff's claims that she was injured, or that her existing maladies were exacerbated after the derailment, do not independently suffice as a scientifically reliable basis for concluding that the alleged exposures were the cause. Instead of reasoning from known facts to reach a conclusion, Dr. Brooks has reasoned from an end result in order to hypothesize what was unknown. He assumes that Plaintiff's injuries were exacerbated by her alleged vinyl chloride exposure, and back-fills this assumption with the hypothesis that the temporal proximity between the development of the injuries and the alleged exposure proves a connection between these events. His opinions are nothing more than unsupported speculation that must be excluded from evidence under Rule 702 and *Daubert*.

D. Dr. Brooks' Dose/Exposure Analysis is Unreliable

"[I]t is well-settled that the mere existence of a toxin in the environment is insufficient to establish causation without proof that the level of exposure could cause the plaintiff's symptoms." *Pluck v. BP Oil Pipeline Co.*, 640 F.3d 671, 679 (6th Cir. 2011); *McClain v.*

Metabolife Int'l, Inc., 401 F.3d 1233, 1241 (11th Cir. 2005) (“[T]he link between an expert’s opinions and the dose-response relationship is a key element of reliability in toxic tort cases”).

Here, Defendants do not dispute that a limited amount of vinyl chloride was released following the derailment. However, merely documenting the existence of vinyl chloride does not prove actual exposure to Plaintiff, nor does it prove that Plaintiff received a sufficient dose to cause or exacerbate her alleged injuries. Causation requires a showing of exposure and dose levels sufficient to cause the injuries claimed. *Allen v. Pennsylvania Eng’g Corp.*, 102 F.3d 194, 199 (5th Cir. 1996); *Wright v. Willamette Indus., Inc.*, 91 F.3d 1105, 1107 (8th Cir. 1996); *Amorgianos v. National Railroad Passenger Corp.*, 137 F. Supp. 2d 147, 163 (E.D.N.Y. 2001) (finding that in a toxic tort case, expert testimony on general causation must include testimony on exposure, dose, duration and causation to satisfy *Daubert*).

Here, as established in Defendants’ Memorandum, Dr. Brooks never attempts to establish the dose of vinyl chloride to which Plaintiff was allegedly exposed. Def. Mem at 10-12. Likewise, Dr. Brooks never sets forth the level of vinyl chloride he believes is required to cause exacerbations of asthma or deteriorated respiratory function. Instead, conceding that he has failed in this regard, Plaintiff contends that “no precise measurement of [Plaintiff’s] level of vinyl chloride exposure is needed”, and that Dr. Brooks’ reliance on temporal relationship is sufficient. Pl. Opp. at 10. Among other cases, Plaintiff clings to *Kannankeril v. Terminix Int’l. Inc.*, 128 F.3d 802, 809 (3rd Cir. 1997), and advocates an overly broad and unfounded interpretation of that case. *Kannankeril* does not stand for the blanket proposition that there is no need to show the precise level of exposure to prove causation. The *Kannankeril* Court explicitly noted that the physician there had “sufficient knowledge of exposure” because he reviewed and considered application records for the pesticide which showed when, how much, and where the pesticide

had been applied. *Id.* at 808. The plaintiff's exposure from the repeated pesticide applications inside the *Kannankeril* home was far more readily inferred than Plaintiff's unknown exposures here in an outdoor setting where there were numerous variables at play (i.e. wind, terrain, atmospheric conditions, Plaintiff's alleged location, etc.). Moreover, general causation was not disputed in *Kannankeril*, and plaintiff developed toxic effects of the pesticide that were "well recognized by the scientific community", which is not the case here. *Id.* at 809. Additionally, in *Kannankeril*, the court relied on the fact that the defendant never raised any other theories of causation to challenge the expert's opinion. *Id.* at 808. Here other viable theories of Plaintiff's cough have been raised by Defendants (specifically, Plaintiff's mother's smoking history and other possible environmental exposures, etc.). *See* Def. Mem. at 14-15. Accordingly, Plaintiff's reliance on *Kannankeril* is misplaced.

E. A Causation Opinion Cannot Be Untethered To Any Scientific Evidence.

To explain the lack of published literature linking the alleged exposures to Plaintiff's alleged injuries, Plaintiff cites *Heller*, 167 F.3d at 155, for the proposition that in certain instances, a medical expert need not cite published studies on general causation to make a reliable causation determination. However, the *Heller* court stated that some basis must be given to support the causation testimony. *Id.* at 157-159. As here, the plaintiff's expert, who had identified no literature and had not eliminated other potential causes, was relying solely on a temporal connection. *Id.* Ultimately, the court held that the expert was properly *excluded*, reasoning that his methodology was "based on speculation and estimation," and none of his assumptions appeared to be "supported by reliable scientific methods or the reliable application of any valid theory." *Id.* at 162-63.

Likewise, Plaintiff cannot save Dr. Brooks' causation opinion as to acute vinyl chloride exposure and its respiratory effects by pointing out his reliance on studies involving "analogous

conditions.” Pl. Opp. As previously established, the two studies that Dr. Brooks referenced at his deposition are not analogous to the exposures in this case. By Dr. Brooks’ own admission, the Suzuki article was an animal study on mice, and the Lilis review (which focused on primarily workers in PVC plants which were exposed to much greater quantities of vinyl chloride than alleged in this case) discussed only exertional dyspnea (shortness of breath), not cough. Brooks Dep. at 47-49. Clearly, these do not support his opinion that Plaintiff’s brief exposure to vinyl chloride exacerbates coughing and respiratory problems in children.

F. Failure To Address, Much Less Follow, The Bradford Hill Criteria Renders An Expert’s Methodology Unreliable.

Also without merit is Plaintiff’s unsupported contention that “the Bradford Hill factors do not apply in cases focusing on acute exposure.” Pl. Opp. at 24. Although Plaintiff cites to a number of cases for the proposition that a strong temporal relationship and immediate symptomology can support a conclusion of causation, those cases are distinguishable from the instant case. *See, e.g., Cavallo v. Star Enter.*, 892 F.Supp. 756 (E.D. Va 1995). As Sir Bradford Hill stated, “if specificity exists we may be able to draw conclusions without hesitation.” *See HILL, A. B.* (January 01, 1965). *THE ENVIRONMENT AND DISEASE: ASSOCIATION OR CAUSATION?*; *Proceedings of the Royal Society of Medicine*, 58, 295-300. However, here, there is no specificity of association, or single cause, of the injuries alleged, particularly when Plaintiff’s injuries clearly existed prior to the derailment. Accordingly, application of the Bradford Hill criteria is necessary and appropriate to determining if there is another way of explaining the set of facts present in this case. However, since Dr. Brooks was not even aware of the Bradford Hill criteria, he obviously did not use them in causally relating Plaintiff’s symptoms to her alleged vinyl chloride exposure. Brooks Dep. at 133; *see also In re Breast Implant Litig.*,

11 F. Supp. 2d 1217, 1234 n.5 (D. Colo. 1998) (failure to address, much less follow, the Bradford Hill criteria renders an expert's methodology unreliable).

G. Dr. Brooks' Opinions Do Not Establish Specific Causation, Because He Improperly Ruled In Vinyl Chloride And Improperly Ruled Out Other Alternative Causes

Assuming, *arguendo*, that Dr. Brooks could establish general causation and "rule in" vinyl chloride as the causative agent in this circumstance, his opinions cannot establish specific causation. Dr. Brooks admitted that genetic predisposition itself is an independent, substantial cause in the development of asthma. Brooks Dep. at 59. Furthermore, to the extent that the Plaintiff's development and exacerbation of asthma was caused by environmental factors, including the poor air quality in Paulsboro or her mother's smoking, Dr. Brooks has failed to perform a proper differential diagnosis to rule out such other potential triggers or exacerbating events. *Id.* at 62.

The Third Circuit recognizes the application of differential diagnosis for the purposes of determining specific medical causation. *Heller*, 167 F.3d at 154. However, the mere statement by an expert that he applied a differential diagnosis in determining causation does not *ipso facto* make that application scientifically reliable or admissible. Indeed, in *Heller* itself, the Third Circuit affirmed the district court's exclusion of expert opinions based on the purported use of differential diagnosis. The Third Circuit noted that differential diagnosis would sustain a specific causation opinion if it was "thorough," if it "ruled out other possible causes," and if it was based on "a valid and strong temporal relationship." *Heller*, 167 F.3d at 154. But even an exact temporal relationship and a "proper differential diagnosis" by a "well-qualified physician" would not serve as the foundation for an admissible causation opinion regardless of the circumstances. *Id.* Accordingly, the court pointed out that it would "not necessarily [be] error to exclude [the

expert's] conclusion as unreliable if [the expert] relied on no scientific studies and the remaining foundation for his conclusion was shaky.” *Id.* at 156.

Here, although Dr. Brooks may claim to have employed a differential diagnosis in reaching the conclusion that vinyl chloride exacerbated the Plaintiff's respiratory injuries, a closer review reveals that this diagnosis is not valid or reliable. There are many elements of Plaintiff's medical background that could equally account for Plaintiff's asthma exacerbation - genetics, her mother's smoking, as well as other environs and triggers known to exist in Paulsboro, which could equally account for her increased coughing. However, Dr. Brooks fails to properly account for these alternative theories, which strongly indicates that his conclusions are not grounded in reliable scientific methods, as required by *Daubert*.

III. CONCLUSION

For the foregoing reasons, Defendants, Consolidated Rail Corporation, Norfolk Southern Railway Company and CSX Transportation, Inc., respectfully request that this Honorable Court exclude the proffered expert testimony of Lee Brooks, M.D.

Respectfully Submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this 6th day of July, 2015, a copy of the within Reply Memorandum of Law in Support of their Motion to Exclude the Expert Report and Testimony of Lee Brooks, M.D. was served on all counsel of record via efile.

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